

# THE MEDICAL EXAMINER.

DEVOTED TO MEDICINE, SURGERY, AND THE COLLATERAL SCIENCES.

EDITED BY J. B. BIDDLE, M. D. AND M. CLYMER, M. D.

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[Vol. I.]

## VARIOLA, OR SMALL-POX.

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[Reported for the Medical Examiner.]

My attention is next to be directed to the consideration of eruptive fevers, commencing with variola, or small-pox. This is a disease of modern times; no account of it is to be met with in any of the writings of Greece or Rome, which have descended to us. Endeavours have been made by Willan and others to trace it to antiquity. But, elaborate and recondite as were their researches, they have not produced any satisfactory evidence of its existence, and the fact, as stated, is now sufficiently conceded. It has, on this point, been forcibly urged by Sydenham, Mead, and Freind, that, since Hippocrates, and, especially, Celsus and Galen are silent in regard to it, the works of the two latter being a sort of a digest of the knowledge of their predecessors, we are entitled to this conclusion, and the more so, from the precision of their history of diseases, that no such had occurred, or with which they were acquainted.

The earliest notice of it is by the Arabian writers. An old manuscript in the library at Leyden, dated 572, declares, that, "in this year, small-pox and measles made their appearance in Arabia." It seems, however, that, several years before, it broke out at the memorable siege of Mecca, where it raged with great violence in the Christian army, leading to its total discomfiture. This event happened, according to Gibbon, the historian, two months prior to the birth of Mahomet.

To Rhazes, a most distinguished man, who lived at the commencement of the 10th century, we are indebted for the first full and accurate description of small pox; and he states, that it was brought out of Ethiopia into Arabia. To the writings of his predecessors long since lost, by whom it had been previously noticed, he, however, refers, and, especially, to those of Ahron, a physician of Alexandria, in Egypt. The latter resided in that city, in 641, when attacked by the Arabians under Omar, the successor of Mahomet, and it is not improbable, the disease was conveyed to it by the invading army, and, in this way, he became conversant with it. Comparing dates, we shall find, that this was seventy-nine years after the siege of Mecca, on which occasion, so far as ascertained, small-pox, as I have said, sprung into being.

Nevertheless, by some it is supposed, that it originated in China, or the remoter India, or that, at least, it was known in these regions for centuries anterior to the period I have mentioned. But medical writings not existing, or to which access can be had, among these people, this opinion, not resting on authentic records, is a mere deduction from their mythology, religious institutions, some

allusions in their civil history, their traditions, and other sources equally vague and inconclusive.

Considering, however, the intimate connection of the Arabians with the East, they might have derived it from that quarter of the world. Be this as it may, we have the most satisfactory proof of its introduction and diffusion through Spain, Sicily, and the Levant, by the Saracens, when they, in the eighth century, overran these countries. But though it had thus gained a partial admission into Europe, it did not generally, till the close of the twelfth, or the beginning of the thirteenth century, when the Crusaders were engaged in the Holy Wars.

Contracting the contagion in Palestine, these bold and enthusiastic adventurers introduced it, on their return, into their native places. The intercourse of the nations of Europe with each other, becoming greatly extended by commerce, about this time, it spread rapidly throughout Christendom, and, for several hundred years, its ravages were terrible. Nor were these, subsequently, in our own hemisphere less extensive in proportion to the number of subjects. Conveyed to it by the successors of Columbus, the tale of the misery and desolation it inflicted is painful to peruse. Twenty-five years after the discovery of this continent it occurred, and we are told, that it destroyed more than a moiety of the population of the provinces into which it penetrated. Three millions and a half are computed to have fallen victims to it, in a very short time, in the kingdom of Mexico alone.

Brought afterwards by emigrants from Europe to our immediate land, it swept off also, several tribes of the aborigines, leaving scarcely a sufficiency of them to preserve their name. Gradually it reached other and obscurer regions, owing to the enterprises of discovery and exploration, or to the slower encroachments of civilization, till very few portions of the globe, perhaps, can now claim an exemption from it. There is, indeed, only a single exception in the universality of its pervadence of which I am aware. It is stated, on the best authority, "that no case of small-pox, measles, or whooping cough, has been met with in New South Wales,"\* which is the more remarkable, from the freedom of intercourse with that colony.

Not having existed in the classic ages, there could be no term for it in the Greek or Latin languages. But as some appellative designation was required for the disease, Variola was coined from either the Latin word *Varius*, signifying *spotted* or *speckled*, or *Varus*, a *pimple*. The vernacular title is said to be derived from the Saxon *pocca*, a poek or little pouch, and the epithet *small*, *variola minuta*, was afterwards adopted to distinguish it from syphilis, when it appeared, then vulgarly called great pox.

\* Evidence before the Committee of Emigration of the House of Commons.



The first case on record of *Variola*, by this name, is that of Elfrida, daughter of Alfred of England, and wife of Baldwin the Bold, Earl of Flanders, and the next, that of her grandson, Baldwin. The one occurred in 907, and the other in 961. These cases are interesting as showing, that the disease had crept into the west of Europe at an earlier date than is generally stated. Nor, probably, were they the only instances of it. Destitute of medical writers at the time, there was no regular history of the disease, and it is presumable, that these two cases were singled out by the monkish annalist who relates them, as notable events, from the superior rank of the personages in whom they happened.

It has been usual to divide the variolous disease into two species, or varieties, according to the appearance of the eruption, the distinct or discreet, and confluent, or, when the pustules are separate, or, with intervening spaces between them, and when they run into each other and coalesce, so as to form nearly an undistinguishable mass. But this is an arbitrary division, it often happening, that while the eruption is distinct in one, it may be confluent, in other portions of the body. It is also wrong to characterize a disease by a single incident, however prominent it may be, and, especially, when it is fluctuating, and liable to diverse modifications. Besides which, the distinction is founded entirely on an external appearance, that has comparatively little connection with the real pathology of the disease. As variola is attended by fever, or a general condition, either inflammatory or congestive it seems to me, it were better, to treat of it, at least as concerns practical advantages, in conformity with these views, and, hence, I shall adopt such an arrangement.

Nothing very peculiar is discernible in the introductory symptoms, of the first or inflammatory small-pox. Like pyrexia, generally, it commences with languor, weariness, aches in the head, back, and lower extremities, chilliness, alternated by flushes of heat, thirst, nausea, or vomiting, præcordial uneasiness, pain in the epigastrium, and some rigidity, or soreness of throat. Fever being developed, the pulse becomes full and active, the skin warm, the face turgid, the eyes slightly injected, the perspiration hurried, the tongue white, or sometimes red at the point or edges, the stomach still irritated, and betraying tenderness on pressure, the bowels costive, and the urine scanty, and high coloured. The irritation extending to the lungs or appendages, these betray the implication, by acute or dull pain, in some part of the chest, and by more or less embarrassment of breathing, according as the pulmonary substance or tissues, or the trachea, or its terminations may be concerned.

Continuing pretty much in this way, till towards the third day, some exacerbation of the febrile state is manifested, and now confusion of mind, or even delirium may occur, or there is heavy somnolency only. The epigastrium is exceedingly tender, the vomiting more violent, the tongue very florid, the hands and feet cold, while the surface, generally, is hotter, with a singularly copious perspiration, emitting a very peculiar and offensive odour. Nor is the pulmonary disturbance less heightened, by an increase of the catarrhal, laryn-

getic, pleuritic, or peripneumonic affections. During this period, hæmorrhage from the nose is apt to occur in adults, and convulsions in children, in whom this further peculiarity may be remarked, that they perspire less, and have not, in an equal degree, the smell to which I have alluded. An exasperation of symptoms is usually the immediate precursor of the eruption.

Breaking out, as minute red specks, about the end of the third, or early on the fourth day, first on the face, particularly on the forehead, nose, around the mouth, then on the neck, and wrists, the eruption extends over other parts of the body, the chest, abdomen, and back, lastly on the lower extremities, and is completed in forty-eight hours. From the commencement of the eruption, the fever gradually abates, and, with its completion, entirely subsides.

These red specks, at the close of the second day, become a little elevated, having a slight central depression, and an inflamed base. Towards the fourth day they undergo a further change. Now may be perceived in them, a small portion of limpid fluid, as in a vesicle; thence they enlarge and become more conspicuously depressed in the middle. An inflamed circular margin or areola, of a rose or damask colour surrounds each, which, the eruption being considerable, spreads, and runs into each other, occasioning more or less increase of tumefaction, especially of the face and eyelids. By the seventh or eighth day, the vesicles having further augmented in size, they assume a more spheroidal shape, and begin to fill with purulent matter. It is conjectured, though not satisfactorily, that the vesicle is thus gradually converted into a pustule by the absorption of the pellucid fluid, and the secretion of pus in place of it, or by the former being changed into the latter. This suppurative process continues for three or four days, the pustules growing still larger, fuller, more yellow, and opaque, till they attain maturity, which is generally on the twelfth day, and now, from extension, lose their central depression, or at least, most of them undergo this change.

It is at this period, when the eruption is extensive, that the secondary fever, as it is called, arises, owing to the irritation of the skin, which subsides with the cause of it. There is, simultaneously with the fever, an aggravation of the soreness of throat, and difficulty of swallowing the saliva, and fluids of the fauces, which become very viscid, creating a constant seriatu, or hawking, or a copious salivation ensues, especially in grown persons—and the voice is hoarse, with other evidence of laryngeal irritation.

Little alteration immediately takes place in the eruption, and, sometimes, it remains stationary for several days. But, more commonly, a dark spot is soon discernible in the centre of the pustules, and, with this appearance, they begin to shrink, and dry away, till scabs are formed, which, falling off, leave a red surface, that gradually disappears, or pits, or scars, which permanently endure. In the decline of this state of things, the same order is observed, as in the rise and progress of the eruption—first decaying on the face, and so, successively, as it appeared.

Conformably to the preceding account, the ca-



reer of this disease is distinguished, by four different stages, the invasive or febrile, the eruptive, the maturative, the declinative or scabbing, between each of which stages, there is an interval, averaging from three to five days. This is the usual character of inflammatory small-pox, where distinct, though it is often infinitely milder, and more benignant. Even this form of it, however, is subject to great varieties in many other respects, and which are made the basis of numerous species by the nosologists. It is impossible, within my limits, to notice in detail, these diversities, and modifications. No eruption whatever, in some cases, follows the fever; there are others, in which the form and contents of the pustules are widely different, and hence, the distinction of vesicular, vesiculopustular, crystalline, watery, siliquose, varicose, and horny pocks, &c. &c.

To these may be added other peculiarities; the first, where one or more pocks are included in another larger pock, or vesicle, the second, in which fresh pocks are formed on the tops of those previously existing, and a third, where there is only an efflorescence. These several varieties sometimes prevail pretty generally, though oftener individually, here and there a case presenting itself as a mere anomaly.

The disease being of an extreme typhoid or congestive nature, it sometimes begins with the manifestations of collapse, cold skin, pale and sunken countenance, great anxiety and oppression, and a very feeble circulation, which state may continue with little or no reaction. But more frequently, the invasion is indicated by languor and listlessness, dejection of spirits, heavy sighing, muscular soreness, and severe pain in the back and lower extremities, alternations of chilliness and flushes, great præcordial distress, and sickness of stomach. This state, which is usually protracted, is slowly succeeded by the development of fever, with a small, weak, quick pulse, unequal distribution of temperature, the head and trunk being extremely hot, amounting to even the "*calor mordax*," of the old writers, while the extremities are cool, the perspiration scanty and clammy, or the reverse, copious, and of a cadaverous odour. As the disease proceeds, it is marked by a gradual disclosure of cerebral and nervous disorder, giddiness, disposition to syncope, heaviness or absolute coma, subsultus tendinum, sometimes convulsions, free discharges of pellucid urine and watery diarrhœa, particularly if there be not vomiting.

The state of the epigastrium is not uniform, sometimes exquisitely tender on pressure, and is often otherwise, owing to the extinguishment of organic sensibility. Nor is that of the tongue, which is florid, and apparently raw, or heavily encrusted with dark sordes.

Generally, the eruption shows itself earlier, by a day or two, than the ordinary period, while, in other instances it is more delayed, even to the fifth, or sixth day, sometimes partially appears, and recedes, producing the most deadly sickness, syncope, or stupor, and convulsions. Taking place, however, the face is covered with small papular specks, which run into each other, forming a red, tumified rugous surface.

But, on some occasions, the primary appearance

is that of an erysipelatous rash, or efflorescence. Little or no remission of fever is discernible on the occurrence of the eruption, and very often it is exasperated.

Great irregularity prevails in the further progress of the case. The eruption tardily advances, or reversely, very rapidly, so that the entire superficies is almost simultaneously covered. It may happen that the natural powers stop at this point, and no further effort is made towards pustulation, and the eruption becomes livid, or the whole recedes. But where it is otherwise, the pimples gradually enlarge, and fill with a thin, gleety, or darkish fluid, and rarely with yellow, consistent, purulent matter. These imperfect vesicles, instead of assuming a definite figure, with a flattened surface, and central indentation, are of every shape, sometimes conoid, or sunken, with ragged edges, coalescent, or interfluent, or if there be intervening spaces they are very pallid.

Every portion of surface is, at this time, swollen, the face, the eye-lids particularly, so much so, as to be closed, and the hands and feet, in scarcely a less degree. The eruption having reached maturity, the pustules are so blended, as to form one mass, or, in some parts, scarcely any separation can be discerned between them, constituting the confluent disease, which, though it may occur in the inflammatory, is much more incident to the congestive form of it. Extreme exhaustion not existing, an increase with the secondary fever of all the affections takes place.

To an aggravation of sore throat, and difficulty of swallowing, are added obstruction of the larynx, and much pulmonary and cerebral disorder, from heavy venous congestions of, or effusions in these organs. Cases of extraordinary malignity are, moreover, marked by petechiæ, vibices, colliquative hæmorrhages, especially bloody urine, with copious diarrhœa, and the pustules finally bursting, the matter escaping hardens into brown crusts, which fall off in ten or fifteen days, should life be preserved.

Of the malignant, there are as many varieties as of the more benignant disease, among which, may be enumerated, the erysipelatous, the morbillous, the miliary, sanguineous, and gangrenous or putrid, so called from the exhibition of such appearances, instead of those of the ordinary eruption.

(To be continued.)

*Observations upon the varieties of deviation, to which the last Grinder, or Wisdom Tooth of the Inferior Maxillary bone, is subject, and upon the accidents which may follow its growth.* By JAMES TRUDEAU, M.D.

DENTITION of the deciduous teeth is often accompanied by serious disorders, and receives a considerable share of attention from every careful physician. Not so, however, with dentition of the permanent teeth, which commonly takes place without much suffering. I propose, in this paper, to notice briefly the accidents which, sometimes, occur during the growth of the wisdom tooth, and more particularly that of the lower jaw: first, when the space, between the second molar and the base of the coronoid process, is not sufficient to allow of



its free growth—secondly, when there is sufficient space, but the tooth takes a wrong direction, first obliquely from behind forwards, and is arrested by the next grinder; secondly, from without inwards along the tongue, causing excoriation of that organ, and impeding its motions; thirdly, from within outwards, so as to penetrate the cheek; fourthly, when the wisdom tooth is detained in the base of the coronoid process; and, fifthly, when it remains covered, at its posterior part, by a hardened gum.

It would be easy for me to multiply these deviations from normal growth, and add many other instances of mal-position of the inferior wisdom tooth, but they may all be easily reduced to the five species just enumerated.

## OBSERVATION I.

*The Wisdom Tooth growing from behind forwards, and its growth stopped by the next grinder.*

Madame R—, a young lady, twenty-two years old, felt, three or four months after marriage, a sharp and deep-seated pain in the angle of the inferior maxilla of the left side, the pain soon extending throughout the whole bone. All her teeth were painful, not, however, of the nature of an ordinary toothache. She passed a few months in this state, and as the pain was daily increasing, her physician, suspecting the affection to be rheumatic or neuralgic, resorted to various remedial agents to get rid of it. He began with an anti-phlogistic course, by regimen, leeches, poultices, baths, emollient drinks, &c., but without avail. He then used, with no better success, dry and opiate frictions, blisters, and the different antispasmodics. Acupuncturation, a seton at the back of the neck, and the sulphate of quinine internally, were also unsuccessfully tried.

By the advice of the most distinguished physicians of Paris, the lady tried the baths of Bourges, but returned, suffering from excruciating agony. At this time, she consulted Dr. —, without, however, much hope of relief. When the doctor saw her, her countenance was extremely pallid, she was much emaciated, her strength was impaired, and her appetite gone. For a year, she had been almost literally without sleep, the calm of night bringing with it only the feeling of despair.

Her teeth were sound and white, the gums of a pale rosy colour, and there was not the least appearance of the growth of a wisdom tooth. Examination was, however, directed to this quarter. A deep incision was made in the gum, with a curved bistoury, behind the second large grinder. A small probe being introduced, a hard body was felt. Under the belief, now, that there was a tooth growing obliquely forwards, the growth of which was prevented by the adjoining tooth, the second large grinder was immediately extracted. A few days after this operation, the pain entirely disappeared, and the lady now enjoys excellent health.

M. Esquirol, to whom I communicated this fact, told me that he had cured a young lady, who was insane, of her mania, by the extraction of the second molar tooth, which was, in the same manner, preventing the growth of a wisdom tooth.

To understand affections of this nature, it must be borne in mind, that, when a tooth makes its appearance through the gum, the roots have not

attained their entire length. They grow from within outwards, and, if the crown of a growing tooth is stopped by any impediment, during its evolution, the root, increasing in length, by the process of ossification, occupies a place not intended for it by nature, and powerfully compresses the nerves of the part. It is easy, then, to understand the disturbance, caused by a wisdom tooth's being imbedded in the coronoid process, or being arrested by the thickness of the gum, or growing against the next molar, as in this case.

## OBSERVATION II.

*The Wisdom Tooth growing from without inwards, on the side of the tongue, and causing an ulceration, of a syphilitic appearance.*

Mr. M—, formerly an officer in the army, living in the country since 1815, came to Paris, with the intention of undergoing an anti-syphilitic treatment, laboring under the idea, that he was affected with the venereal disease. He had had, for some months, an ulceration, at the base of his tongue, on the left side. The movements of this organ were deranged. Mastication was particularly painful. The mercurial treatment, to which he submitted, by the advice of an eminent practitioner of Paris, only aggravated his symptoms. After twenty days' continuance of this treatment, the tongue became enormously swelled, so as entirely to fill the mouth; the gums were in a fungous state, and the breath offensive. This treatment having been suspended, M. M— applied to Dr. —. After a very careful examination, he soon discovered, in the maxillary bone, at a distance of about half an inch from the posterior dental canal, a hard body, covered by a floating or moveable portion of the gum. An incision having been made in the gum, a portion of the crown of a wisdom tooth was distinctly visible. The tooth had grown in a wrong direction, and, being in contact with the base of the tongue, had occasioned an ulcer. The tooth was immediately extracted, and a few days after, the ulcer healed up.

## OBSERVATION III.

*The Wisdom Tooth growing from within outwards, and penetrating into the substance of the cheek.*

Miss B., twenty-nine years of age, consulted Dr. — for an immense swelling, on her right cheek, opposite the wisdom tooth, which was exceedingly painful, particularly upon opening the mouth. The doctor suspected at once that this irritation depended on the growth of the last grinder, the crown of which, being directed from within outwards, was penetrating into the substance of the cheek. Upon examination with the finger, this tooth was felt growing in a horizontal direction, and quite imbedded in the muscles. Had it been possible at once to extract the tooth, the patient would have been speedily relieved. But, the swelling of the gums and of the internal part of the cheek, which was ulcerated, interfered with the operation. The tooth was, besides, very much decayed, and would have been broken by any instrument. The indication, then, was to lessen the irritation, which was caused by the crown of the tooth acting as a foreign body. A piece of cork, prepared so as entirely to cover this,



and deeply grooved, was placed between the cheek and the teeth. This little apparatus was fastened to the first molar, and remained in its place for three days. Poultices were applied to the cheek, and slightly acidulated gargles used. At the end of the time mentioned, the irritation had subsided, so as to allow the tooth to be extracted, after which, the unpleasant symptoms at once disappeared. These deviations of the wisdom tooth outwards are of common occurrence in practice, but the inclination is generally very slight, and the removal of the tooth not often demanded.

## OBSERVATION IV.

*The Wisdom Tooth arrested in its growth by the base of the coronoid process.*

In this case the right cheek was swelled to an enormous size, the swelling extending from the eyes to the clavicle. The face and neck were covered with numerous abscesses. For twenty months, the man had not been able to open his mouth, and had been fed on liquids, passed through an opening caused by the absence of a tooth. He had, besides, a fistula, at about three inches from the lower angle of the inferior maxilla. A little lower on the neck, there was another. A probe, being introduced into the first fistula, penetrated obliquely, from before backwards, and was stopped by a hard body, supposed to be the root of the third large grinder. From the beginning of the affection, the man's health had been greatly impaired; he was much emaciated, his skin was of a leaden hue, and he suffered much from colics. For a short time past, his digestion had been disordered, and attended with acidity; this, probably, depended on the mixture of his food with the pus, with which his mouth was constantly filled. Various means were resorted to, to open the patient's mouth, and extract the tooth. Leeches, poultices, mercurial frictions, blisters, and compression were used with no better success. Dr. — now thought of trying a mechanical agent, which succeeded perfectly. It was a conoidal piece of wood, introduced between the dental arch, and pushed in slowly by the patient himself. The following day, the mouth presented an opening of about four lines. A week afterwards, the man's mouth was opened wide enough to allow of the tooth being easily extracted.

A few days after, a necrosed piece of bone was extracted. It proved to be a portion of the base of the coronoid process, on which was moulded or cast a portion of the crown of the tooth. This evidently showed that the tooth had been stopped in its growth by this bone. Since that time the inflammation rapidly disappeared, and in a month the patient was perfectly cured.

## OBSERVATION V.

*The Wisdom Tooth growing under a portion of the gum which cannot be cut by the tooth.*

Orage, a waiter, for a year past had been subject to frequent inflammation of the cheek and fauces,—indeed, ever since the first appearance of the wisdom tooth of the left side. During one of these attacks he was advised to consult Dr. —. His cheek was swelled, and the tonsil of the left side was inflamed, as well as the fauces. Behind

his second large grinder, the crown of a wisdom tooth could be perceived, and covered in its two-thirds by the gum, which was ulcerated. A simple incision through the gum was all that was necessary in this case.

Cases of this description repeatedly occur in practice, and do not always terminate happily. When indurations of the tonsils occur, this gland must be removed.

PARIS, 20th March, 1838.

## BIBLIOGRAPHICAL NOTICES.

POPULAR MEDICINE, or, *Family Adviser*, consisting of *Outlines of Anatomy, Physiology, and Hygiene, with Hints on the Practice of Physic, Surgery, and the Diseases of Women and Children, &c. &c.* By REYNELL COATES, M. D., Fellow of the College of Physicians of Philadelphia, &c., &c. Philadelphia: Carey, Lea, & Blanchard. 1838. 8vo. pp. 614.

THAT "the medical profession has opposed, at all times, the publication of works on domestic medicine," is Dr. Coates's very candid admission in his preface to the *Popular Medicine*. That, however, "the principal evils which have resulted, and are likely to result hereafter, from attempts at popular medical instruction, are attributable rather to the manner in which the subject has been treated, than to the nature of the subject itself," we are much disposed to doubt. The difficulty lies in the subject: medicine cannot be popularized. For the general ability with which he has fulfilled his task, Dr. Coates deserves high praise; to the excellence and practical value of the First Part of his work, the *Outlines of Anatomy, Physiology, and Hygiene*, we very readily bear testimony; but, we are compelled to add, that a perusal of the *Practical Directions for the treatment of medical and surgical cases*, although it has impressed us favorably of the style in which it is executed, has not satisfied us of the utility of such productions, nor shaken any of our objections to their publication. Popular treatises on medicine should be confined to the subjects of anatomy, physiology, and hygiene. As well physically as mentally, the proper study of mankind is man. Some acquaintance with the structure and with the healthful functions of the human body, should be considered essential parts of a liberal education. A knowledge, too, of the general principles of hygiene is within the scope of every intelligent mind, and cannot be too generally diffused. But within these boundaries lies the proper province of the popular writer on medicine. Within them he can be most useful, but he may not safely go beyond them. We cannot but regret, then, that Dr. Coates did not confine his labours to



the production of a work like the *Philosophy of Health* of Dr. Southwood Smith; that he did not, indeed, stop short with the excellent first part of his book, nor venture into rivalry, however reluctantly, with the not very creditable host of "previous authors, with whom to affiliate," he tells us with a sincerity which we can understand, "falls not within the province of his ambition."

It is apparent from the tone of the author's introductory remarks, that he himself feels all the force of the general objections to the class of works in which his own must rank. We are, therefore, unwilling to urge them at any length. We would fain admit that there may be considerations of *expediency*, that justify his dereliction from what he admits to be *right in the abstract*. We are cheerfully disposed to give due weight to his plea, for a useful circulation of his book in growing Western populations, unsupplied with medical advice, and in Southern plantations, cut off from the rest of the world, and we shall heartily rejoice, if he can at all check the growth of the vile quackery, which is defiling the land.

One other point, and we have done. We must protest against the tender of the Popular Medicine as "a useful sketch to young men about commencing the study of medicine." The groundwork of a successful comprehension and application of therapeutics, is a knowledge of pathology and an aptitude at diagnosis, the results of long and painful previous training. The smattering, to be obtained from works like the Popular Medicine, can, at best, be but useless, and, by creating erroneous impressions, may do positive harm.

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*The Louisville Journal of Medicine and Surgery.*

Edited by LUNSFORD P. YANDELL, M. D., HENRY MILLER, M. D., and THEODORE S. BELL, M. D.  
Vol. I.—No. 1. Louisville, Ky.: Prentice & Weissinger. 1838. pp. 250. 8vo.

THIS is another evidence of the indomitable enterprise of the West, and we trust that it will be conducted in a spirit to merit and obtain adequate patronage to ensure its permanence. Its avowed connection with the Medical School of Louisville militates, we think, against that general independence and usefulness which should constitute the distinctive character of a scientific journal, and tends to encourage the idea that it may be made the organ of sectional feeling and prejudice. Nor, we must confess, are these doubts altogether removed by a perusal of the first number which is before us.

The contents are divided into Essays, Reviews,

and Analecta. Of the original department, we cannot, with justice, speak in terms of unqualified approbation. The Original Communications are, in general, trite and uninteresting. The analytical notices are of works which have been for some time before the public, and upon whose merits they have long since decided. The selected department is meagre, and can lay no claims to novelty.

We have hazarded these remarks from no feelings of unkindness to the gentlemen who are embarked in the enterprise, whose motives we appreciate, and whose labors we sincerely wish to see prosper, but because we deem that an independent expression of sentiment is always demanded, at every sacrifice.

That the "Louisville Journal" may be eminently successful, and as useful as it is in the power of its able conductors to make it, is our very honest desire.

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## THE MEDICAL EXAMINER.

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PHILADELPHIA, MAY 23, 1836.

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WE promised our readers, some time since, a notice of Dr. Ryan's *Philosophy of Marriage*. This work is a production of a different character, from what we had hoped, and supposed we had a right to expect to find it. It is nominally addressed to the medical profession, but is, in reality, intended to pander to the tastes of that portion of the public, to whom the supposed mysteries, which Dr. Ryan unveils, are matters of curiosity. The subjects of the book are professedly the philosophy of marriage, in its social, moral, and physical relations, with an account of the diseases of the genito-urinary organs, which impair or destroy the reproductive function, and induce a variety of complaints; with the physiology of generation in the vegetable and animal kingdoms. Some other matters, perhaps the most *piquant* portion of the work, are included under the head of a part of a course of obstetric lectures, delivered by the author. All these topics are treated with a freedom which has never been before equalled in a professional writer, and which could, we think, be with difficulty surpassed. We have the whole subject of marriage discussed, from its moral and social features, down to minute details upon the "chaste mysteries of hymen," which the novelist forebore to, but the physician does not scruple to profane. We shall not, of course, enter into any of the interesting points which Dr. Ryan treats of, nor serve up scraps of his *haut-goût* anecdotes. We have noticed his work, only to



condemn it: it is utterly unworthy of analysis or criticism, and deserves only unqualified censure.

Licentious writings from a physician are an inexcusable outrage upon society, which can most justly turn upon him, with the *et tu!* Another offence, of this character, of an inferior grade, indeed, but sufficiently heinous, and more common, is the freedom of language and topic, in which certain teachers of medicine indulge in their lectures to their pupils. An ample latitude for the discussion of scientific subjects is allowable, but there can be no justification for grossness of expression, or the delivery of obscene and generally irrelevant anecdotes. There is evil enough committed, if there be no other, when an assemblage of youth from the different quarters of our country, are led to presume, as they must, the metropolitan tone of manners to be tolerant of the indelicacy of speech, which an individual of age and station is seen habitually to resort to. It is a mistake, too, to suppose that popularity is obtained by this line of conduct. They, who thus court it, should learn to distinguish between the smile of applause and the smile of contempt. We would pray them, then, for their own sakes, to amend a behaviour, which, though it may make the unskilful laugh, cannot but make the judicious grieve—if there be, indeed, any so unskilful as to laugh at so sorry an exhibition.

## CLINICAL LECTURES.

LECTURES ON CLINICAL MEDICINE, *delivered at the Philadelphia Medical Institute, by W. W. GERHARD, M. D., Physician to the Philadelphia Hospital, &c.*

### INFLAMMATIONS OF SEROUS MEMBRANES.

*Tuesday, May 1st.* In my lectures on pathological anatomy, I have already pointed out to you the distinctive characters of the inflammations of the serous membranes. As you, no doubt, remember, these characters consist in the bright arterial injection of the membrane, and the secretion into its cavity of lymph, serum, and pus. The lymph is secreted very early; I once detected it in a case of pneumothorax which proved fatal in an hour after the perforation: at first it is secreted in the form of minute points scattered thickly over the inflamed surface; as these points become more numerous, they gradually run together, until the whole surface is covered by a tolerably uniform coating of lymph, which is then called a false membrane. Portions of the lymph are afterwards detected in flakes interspersed through the serum. The liquid consists chiefly of serum which is slightly turbid from the admixture of lymph, and of a small portion of pus, which gives it a yellowish tinge. The pus is not abundant in acute inflammations, and in subjects of a feeble constitution is scarcely perceptible, but when the inflam-

mation becomes chronic, the proportion of pus gradually becomes more considerable, until it at last forms the whole of the liquid. It is then called an empyema.

The manner in which the gradual absorption of the liquid occurs, and the two surfaces of lymph become organized, and finally adhere together, must also have become so familiar to you as to require no further description at present.

Serous inflammations may be either primary or secondary. When secondary, they are usually dependant, first, on the previous existence of inflammatory rheumatism, secondly, on disease of the organs which they invest, and thirdly, on the existence of a tuberculous diathesis. I shall not now dwell upon the rheumatic causes of serous inflammation, as I entered into this subject, at a former lecture, when speaking of the case of acute articular rheumatism in which pericarditis occurred. Its connection, too, with disease of the parenchymatous tissues covered by serous membranes, we shall discuss at length, on some future occasion, when we may see, that inflammation of the lungs, liver, that in fact, every lesion of an organ, gives rise to more or less inflammation of its serous covering. This process is an effort of nature to isolate and protect the diseased organ. The third cause of serous inflammation, that is, the existence of a tubercular diathesis, is the most complicated, and presents the most numerous points for examination: into some of these we shall enter this afternoon. The connection between serous inflammation and tubercles is the more important, from its enabling us to recognise a number of tubercular cases, otherwise obscure, by reasoning upon the law of pathology, that tubercles are so often connected with inflammation of these membranes.

In addition to those above mentioned, there may be other causes of secondary serous inflammation; they may be mechanical, as perforations, outward violence by blows, and the like; the influence of cold which may be felt in the membrane surrounding the joints, intestines, lungs and heart, produces a primary inflammation.

That secondary serous inflammations are not of much more frequent occurrence than they are, is to me a matter of surprise, when I reflect upon the close connection of the organs with their serous investment; they are comparatively of more importance, than the primary forms, from their more frequent fatality.

There are certain signs common to serous and other inflammations, by which they are generally ushered in. These are chill, fever, and sweating, with a general malaise, or feeling of wretchedness, loss of appetite, thirst, and in fact the ordinary febrile symptoms. They may, however, be entirely absent, and I have seen patients die without either fever, thirst, or severe pain. The pain accompanying serous inflammation is usually sufficiently indicative of its character. It may be said to be specific, being lancinating, sharp, acute, resembling such as would be inflicted by the stab of a knife. It is ordinarily described by patients in these terms; it may, however, be so slight as not to confine the patient to bed, in fact, not severe enough to enable him to localize the disease. Patients often come into the ward, with the gene-



ral febrile symptoms, above mentioned, without local suffering enough to allow them to fix the particular seat of their disease. It is obvious, then, that we cannot trust to this character of pain, in determining the nature of the affection, but must resort to physical examination, the phenomena of which, resulting from the identity of the liquid secreted, will be always the same.

There will be besides a disordered action of the organ invested by the serous membrane; in pericarditis, of the heart, in pleurisy, of the lungs, and in peritonitis, although not so distinctly marked as in other inflammations, there is generally sufficient evidence of disturbance in the action of the bowels.

The state of the pulse is another sign, supposed to be specially characteristic of this disease. But you recollect that, in the case of the man Robb, the pulse was merely moderately frequent, seventy-six per minute, notwithstanding the pericardium was inflamed; and, in another patient, laboring also under intense serous inflammation, you noticed also that it was very nearly of the same frequency, that is, decidedly not febrile. The character of the pulse is, therefore, a faithless sign of the existence of serous inflammation; it may be peculiar, small, wiry, and of intense activity, in which case bleeding is demanded without delay; but these distinctive features are not generally present.

In the patient noticed to-day, the pleurisy was nearly, though not entirely latent. The woman, whose case has been before you, had neither pain nor fever, although there was an effusion into the pleura of a quart and more in amount. The signs of this effusion were merely physical. This latent pleurisy is a common affection with old people, many of whom perish from it, when supposed to die simply from the decay of old age. In young persons these diseases are not so often latent, except in a very chronic form, or where the patient has been exhausted by chronic illness. An example of this was furnished by the case, that terminated yesterday fatally at the hospital. It occurred in a patient, who had been laboring under chronic peritonitis for a year previously, and who was taken about a week since with a slight increase of his ordinary pain, accompanied by severe prostration, which carried him off in a few days. An exception to this rule, however, occurred at the Pennsylvania Hospital three years since, in the case of a man, who was run over in the belly by a cart. He suffered but little pain, from the first day, and was afterwards suddenly carried off, although the only alarming symptom was extreme exhaustion. Very extensive peritonitis existed, but without pain, although the intestines were covered with lymph. You see, therefore, how difficult it is to recognise the presence of serous inflammations, from the functional signs which are presented. If we had no other means of examination, or if we omitted physical exploration, because there were no special symptoms to arrest and direct our attention, we should be constantly in error. For example, it is a very common occurrence with labouring men, suffering from chronic effusions into the pleuræ, to complain of pain, not in the region of the pleura, but lower down, in the flanks, whence they are sometimes treated merely for lumbago.

In such cases, there is absolutely no rational symptom to indicate the nature of the disease and the proper mode of treatment; it is by the local signs only, that the true character of the affection can be traced.

The duration of serous inflammations is by no means fixed. It may be divided into two periods, the one including the time that passes during the increase of the effusion; the other, that during its stationary and declining stage. After effusion has taken place, it is not possible to cure the patient abruptly; time is absolutely required for the consolidation of the false membrane, and for the absorption of the pus and serum that have been secreted. In all acute inflammations of serous membranes, if you see the case only after effusion has taken place, you may safely predict that your patient will not be well, at least, for several days; and the rapidity of the recovery will depend upon the quantity of liquid which has been effused, and the time it has remained in the pleura. But, if you are called to a case, say of pleurisy, at the beginning of the attack, while there is merely slight inflammation without much effusion, the patient may get well abruptly, and the morbid secretion may be limited to a little lymph, which is a necessary consequence of all serous inflammations.

I do not intend now to enter at length into the peculiarities of treatment, nor into a detail of the physical signs, belonging to the varieties of serous inflammations, except so far as they may be exemplified by the cases, which I shall bring before your notice. The remarks which I have just now made, were necessary in order to make clear a number of cases, the histories of which I shall presently relate to you. You must bear in mind the distinction, which I made between primary and secondary serous inflammations. The first of these is scarcely ever fatal; by interference, you may shorten its course, but you may expect it to get well under any circumstances. Inflammations of this character depend merely on atmospheric vicissitudes or other such cause, and are not preceded by a tubercular lesion, or connected with this diathesis, nor are they the result of a perforation, which is generally irremediable. When you have a secondary serous inflammation, you are to look upon it as an effort of nature for the preservation of the part; and, when, it is complicated with inflammation of the parenchyma of the organ which it invests, it is a curative and preservative process, and is not to be interfered with, unless it is of that severe character which endangers the life of the patient.

The first illustration, which I shall bring before you to-day, is the termination of the case of the man Robb. At the last lecture, I mentioned to you, that the rheumatism was almost cured. The affection of the heart was then, and is still, persisting, although it is now chiefly limited to the internal membrane of the heart, and the symptoms are still so severe, as to prevent the man's yet leaving his bed—a proof of the difficulty of suddenly arresting diseases of this nature. These cases of serous inflammation, occurring during an attack of rheumatism, generally assume a character altogether independent of the course of the latter



affection: the great fire goes out, but the smaller burns slowly on. Not only, indeed, does this cardiac inflammation run its course, but it often leaves behind it organic changes in the heart, that may last for a succession of years or for life, in the form of thickening of the valves, or adhesion of the laminæ of the pericardium. Numerous cases of extensive disease of the heart take their origin in an attack of rheumatism; they may, on the other hand, be of a slight character, and entail no greater disturbance of the economy than slight palpitations, and an inability to use the same amount of active exercise as in perfect health.

The next case I shall notice is somewhat curious; it is pleurisy, occurring in a young Irishwoman, Isabella M'Gargee. In December, 1837, she was exposed to great fatigue, and suffered much mental anxiety during the illness of a relative; she was then taken ill with severe pain in the region of the heart, dyspnoea and palpitation; for these symptoms she was bled and blistered with relief. Her health, however, was not entirely restored; there was still palpitation, at times cough and some oppression. At the beginning of April, she worked very hard in a damp cellar, washing clothes, and was seized, in a day or two afterwards, with fever and pain in the right side, extending from the breast towards the nipple, and much increased by respiration, or by the cough, which was short and dry, not frequent. There was also pain caused by lying on the affected side, with considerable oppression. The gradual increase of these symptoms obliged the patient to enter the hospital. There was no œdema of the limbs, and but moderate palpitation; there was no important previous treatment, and the patient was not strictly confined to her bed.

We now inquire if the disease can here be recognised at the first glance, from the detail of symptoms gathered from the patient. It cannot. Let us enter into an examination of the symptoms. In the first place, can the affection be neuralgia? It has some points of resemblance with this disease, but it differs from it, in many particulars which are sufficiently well marked. First, it is not common for any considerable degree of cough to exist in neuralgia, nor have we in it, a steady, local pain, as in the case described. Another set of symptoms, which establishes the difference between the two affections, is that belonging to the countenance, the medical physiognomy of the case. This is characteristic, not of neuralgia, but of an intense pectoral disturbance.

Satisfying ourselves that it is not neuralgia, we make a general diagnosis of an acute disease of the chest, first, from the severity of the dyspnoea present, established by the spasmodic contraction of the chest and of the nostrils; and, secondly, by the alteration in the colour of the countenance, in the dark blue tinge of the lips and flush of the cheeks. This is not purple enough for the existence of pneumonia, and we, therefore, infer, that our case is, probably, one of bronchitis, pleurisy, or acute phthisis.

Having carried our examination thus far, let us proceed to discriminate between the affections, to which we have reduced the case. This can be done only by physical exploration, without which it is impossible to recognise with absolute certainty

the distinctive features of the disease. What, then, are the physical signs, which establish the character of the affection before us? First, we have an abnormal development of one side of the chest, at the lower part, and diminishing gradually in ascending. This, at once, settles satisfactorily the nature of the affection; it is a pleurisy. Had the development been confined to the anterior part of the chest, it might have been emphysema, or, had it been local, pericarditis; but only a pleuritic effusion could have made it what it was. Next, we have immobility of the ribs: in the present case this could result only from pain, or from old adhesions. The history of the case disproves the probability of the existence of old adhesions on the right side; so that from the pain, then, we again deduce the presence of acute pleurisy.

Continuing the examination, we next proceed to percussion, which yielded the following results. There was flatness in the lower posterior half of the side of the thorax, and of the lower third on the anterior part; as well as of the lower half of the axilla. Thus far, we can diagnosticate, with certainty, the existence of pleurisy; the flatness followed the line of gravity, or, in other words, corresponded with the situation of the liquid, which, following the ordinary laws of liquids, accumulated in the bottom of the chest, just as if it had been contained in a common bag.

We continued the examination, by auscultation. Had the disease been pneumonia, we should have had bronchial respiration and a dry crepitus. This was not the case, as the lung was quite permeable to the air, and not a hard, solid mass. There was no rhonchus, for there was no liquid in the bronchial tubes. The physical signs, then, have led us to a certain conclusion, as to the nature of the affection.

The next question, that presents itself, is, as to the primary or consecutive character of the disease. To solve this question we entered upon an examination by auscultation of the other side of the chest; there was, here, no evidence of the existence of tubercles, in any great numbers, but, from the fact of their being some dulness on percussion, there was reason to suspect their presence, though not to determine it, with any certainty. But from the circumstance of the mutability of the situation of the pain, as there had been, you know, a previous attack on the other side of the chest, the existence of tubercles was rendered probable. It is a law of pathology, that, if a pleurisy appear on one side of the chest, and some time afterwards show itself on the other, it, in all likelihood, is dependent on the presence of tubercles. This law of the double pleurisy, as it is called, was discovered by Dr. Louis, and, in most cases, may be relied on with certainty. I infer, then, that, in this case, the pleurisy was probably tubercular.

Besides the suspicion of tubercles as a predisposing cause of pleurisy, the patient is laboring under an undoubted disease of the heart. It began during the acute inflammation of the early part of the winter, when the pericardium was involved at the same time with the pleura. As a consequence of that inflammation, we have hypertrophy and dilatation of the heart.

The treatment of this patient was active; she



was bled to sixteen ounces, was cupped, and has since taken tartarized antimony and digitalis. Under these remedies, with rest and restricted diet, she is rapidly improving.

The remedy here used, tartar emetic, is found to answer perfectly well in the management of pleurisy. It increases the sweating, and promotes absorption directly; the digitalis has a similar action through the medium of the kidneys. In pleurisy, when the inflammation is circumscribed, local depletion is the best treatment. This acts very promptly in serous inflammations, although it has but slight influence over the inflammations of parenchymatous structures. In the latter case, relief is afforded, only in proportion to the quantity of blood abstracted, while, in pleurisy, it is in proportion to the nearness of the point of abstraction to the seat of pain. The pain is to be relieved, also, by the application of warmth to the part, by poultices and fomentations. These, however, are not to be withdrawn suddenly, or without the substitution of a thick pad; otherwise, they only do harm, by the alternation of heat and cold, which takes place. The advantages of these local applications cannot be too highly estimated. I often rely more upon them, than upon more powerful remedies, which, if they relieve pain, at the same time diminish the strength.

The treatment of ordinary simple pleurisy is not a very complicated affair. And I would remark, that every case, in which there is no positive evidence of a change in the functions of nutrition, even though there may be strong ground of suspicion of a tuberculous or other chronic disease, is to be regarded in the treatment as a simple pleurisy. The treatment of Dr. Louis, which I do not, however follow in all cases, consists in small bleedings, combined with the internal administration of tartar emetic, nitre, digitalis, and diuretics. Of sixty cases, that I saw him treat, he lost not one. It may be inferred, that is an effectual treatment for the management of simple pleurisy. I may add, that, in a simple case, if effusion take place, you need not be very uneasy, if it is slow to absorb, provided the case is otherwise proceeding well.

Of the remedies, by which chronic pleurisy is to be managed, (meaning, by chronic pleurisy, cases of more than a month's duration,) I shall not now treat in full, giving you merely a general summary of them. Blisters, which, in acute pleurisy, are not often necessary, and do harm twice for once that they do good, are of signal service in chronic pleurisy, scarcely ever doing mischief, and often effecting a rapid absorption of the liquid effused. They are to be applied not once, but repeatedly. Under their influence, absorption sometimes takes place, with astonishing quickness; indeed, it seems, in a few instances, as if the fluid was directly poured out from the interior of the chest, to the blistered surface, by a sort of endosmosis. Mercurials, in small doses, are not much used by the French, either alone, or in combination with squills and digitalis. But, in cases approaching in character to hydrothorax, great advantage will be derived from a treatment with calomel, squills, and digitalis. In addition to treatment by medicines, travelling, a sea voyage, distractions, a simple change of place, will be of

much service. The importance of travelling is greatest in those cases in which we fear the complication of a tuberculous diathesis. Whether there be already formed tubercles in the lung, or merely the constitutional tendency to these affections, I am quite sure that by this means and by attention to other hygienic circumstances, patients are often preserved from a threatened consumption.

In addition to the case illustrative of one of the most simple serous inflammations, I shall say a few words respecting another case, in which pleurisy occurred, as a well marked complication. The case was one of pneumonia, consecutive upon tubercles, the existence of which was known by unequivocal signs at the upper part of the lung. There was something, however, engrafted on the pneumonia. This was pleurisy, and was detected by a sign which often occurs in the later stage of the affection, and is then pathognomonic, the *bruit de frottement*, a sound caused by the friction of the surfaces of the pleura, lined with false membrane, upon each other. It resembles the sound produced by the rubbing of leather or India rubber, and is the same grating sound that was heard over the heart of the man Robb, but in the present case it is produced by respiration, and is synchronous with it. It is, also, fugitive in its character, and disappears, when the membranes become consolidated.

I shall conclude with one other case, which terminated fatally a few days since, demonstrative of one of the causes of serous inflammations, the details and phenomena of which will serve as a key for future investigations. It was a case of chronic tubercular peritonitis. My reasons for this diagnosis were based upon, first, the conformation of the abdomen, which was irregularly distended with gas, upon the existence of lancinating, griping pains, or alternations of costiveness and looseness of the bowels, and upon the pain caused by motion, or the distension consequent upon eating; there was, besides, nausea and vomiting. The peritonitis occurred here without any obvious cause, and was, therefore, not primary. For there is a law of the economy that chronic peritonitis is nearly always, particularly in young persons, dependent on the presence of tubercles. In addition to this general law of pathology, the great alteration in the nutritious functions made the diagnosis of the existence of tubercles much more certain. It was, at first, doubtful, from the large distension of the abdomen from serum; but the water here was soon absorbed, and there was no recurrence of ascites. There was evidence also of tubercles in the lungs, although not very decidedly marked. Had there been physical signs of phthisis the case would have been still positive, although we found a sufficient number of signs for the diagnosis.

Most commonly, tubercles appear in the lungs of adults, before they are deposited in other parts of the body; but, in this instance, the application of this general law failed. The patient, some days before his death, was seized with sudden prostration, under which he rapidly sunk, and with some increase of the abdominal pain.

After death, the following appearances were discovered. There was effusion of serum and pus



into the abdomen; in the upper portion there was merely serum and lymph, and, in the lower, the intestines were agglutinated by false membranes perfectly organized, not vascular, but there was red injection in the upper part from a more recent inflammation. The cause of these changes was perforation of the intestine, from tuberculous ulceration of the glands of Peyer, two of which had ulcerated, through all the coats of the intestine, into the peritoneum. The pathology of these perforations is the following:—A tubercular follicle in the intestine, enlarges and softens, and is discharged into the caliber of the gut. The ulcer left does not heal, and, passing into the chronic state, advances towards the serous covering of the intestine, which is sometimes destroyed. The peritoneal inflammation is only an attempt of nature to preserve life by preventing the discharge of fecal matter into the peritoneum. It fails, because the mischief done is too considerable to admit of reparation.

In the lungs, the only evidence of the presence of tubercles, were half-a-dozen grey granulations, that could be felt, but scarcely seen; while, in the peritoneum as well as in the intestines, they existed to such an extent as to cause disorganization. This disease is unusually rife among negroes; indeed, it is sometimes called consumption of the negroes, in the southern parts of our country. It rarely attacks adult males, more commonly females, and is very prevalent with children, in whom it forms one of the diseases known as *tabes mesenterica*, although the mesenteric glands are not invariably affected.

To recapitulate my remarks of to-day:—Serous inflammations may appear as primary and secondary. When primary, they are not dangerous; but they are so, when secondary, because complicated with some previous lesion, and occurring in exhausted subjects. They are to be treated, in both instances, on pretty much the same principles, by depletion, and acting on the skin, with alteratives in the more chronic stages. If excessive pain exist narcotics may be used to relieve it, with the topical applications you may see every day employed at the hospital.

For the proper study of tuberculous diseases, gentlemen, a knowledge of the pathology of serous membranes is indispensable. Previous, then, to entering upon the examination of the former affections, I have introduced the subject of serous inflammations, to facilitate our future investigations. The study of tuberculous diseases is not, as you have also seen, to be confined to the chest, but to be extended to all the organs of the body, as you will more fully learn at a later period.

The tuberculous affection of the abdomen, which has been under consideration to-day, though not the most common form of the disease, in our latitudes, is one of the most prevalent in southern climates, and is on that account the more interesting to many of you.

#### TUBERCULAR MENINGITIS.

*Tuesday, May 8th.*—I shall continue to-day, gentlemen, said Dr. Gerhard, the subject of inflammations of the serous membranes, and take up the consideration of a case, which came under your notice at the hospital, a day or two since, and pre-

sented an example of inflammation of the serous membrane investing the brain. We may the more properly enter upon the subject at this time, as it will facilitate a future examination of the diseases of the substance of the brain.

The patient, of whom I have spoken, died in the ward, No. 3, and was not under my immediate care. He was a carpenter by trade, and had suffered severely in early life from scrofulous affections; both his feet had been ulcerated from this cause, some time previous to his admission. He also laboured under disease of the heart. He entered the hospital for hydrothorax, the cavities of both pleuræ being filled with water, and he suffered under an extreme and distressing dyspnoea. He was relieved from these symptoms by salivation, combined with the use of digitalis and squill. He got rid of his shortness of breath, and was able to work in the out-wards of the establishment, where he continued, until the breaking out of the epidemic of measles, with which disease he was taken on the second of April. He suffered considerably from the measles, but gradually became convalescent, till, on the twenty-eighth of April, he offered some symptoms of a cerebral affection, that is, unusual dulness, stupor, and oppression. On the first of May, the cerebral symptoms became so well marked, that they were recognised as those of meningitis, by the physician in attendance. At that date, he was in the following condition. For two days previously he had manifested great restlessness, with occasional incoherence and hallucinations. Skin warm; pulse full and strong, the *bis feriens* character, attending his convalescence from measles, having ceased from the twenty-ninth of April. This *bis feriens* character, a sign of convalescence from the measles, and which was well marked in this case, ceased, you see, the moment the man was taken with the new disease of the brain. The thirtieth, he was bled  $\frac{3}{4}$ ix; the crassamentum of the blood was tolerably firm, and it was neither cupped nor sisy, about one half of it being serum. The man at this time answered questions slowly. The conjunctiva was slightly injected. The tongue pale, moist, slightly furred. The pupils insensible to light, although he still recognised objects. No cephalalgia. The abdomen resonant; not painful on pressure, except in the hypogastric and pubic regions, where it was also distended and flat on percussion. Percussion of the left side of the chest resonant, except in the præcordial region; respiration pure. Percussion of the right side resonant, but less so than the left. Impulse of the heart strong; the first sound prolonged, attended with strong bellows murmur in the neighborhood of the nipple, the same character of the first sound observed between the second and third ribs; the second sound roughened, and heard over an unusually large extent of the right side. A purgative of salts and senna was prescribed, and a blister to the nape of the neck, dressed with mercurial ointment.

On the third, the countenance was rather less dull than on the first, and he answered questions better; had been delirious the night before. There was some grinding of the teeth. The skin was moderately warm and hot. Pulse ninety per minute, and much smaller. Conjunctiva much redder;



a discharge of a small quantity of yellowish matter from the right eye. In the afternoon, there was some strabismus and increased stupor. An injection of oil of turpentine and castor oil was administered, and cold applied to the head.

On the fourth, there was very great stupor; the eyes were closed, and the patient could not be roused to answer questions. The head was turned to the right side; the right eye inflamed as before; the pupil of the left eye smaller than yesterday. Pulse about eighty-five, irregular and moderately strong. Bowels opened three times by the injection. Abdomen supple, and not distended. Cold to the head continued; calomel, followed by senna and salts. The same day, the man died.

The symptoms here, you perceive, were not those, which denote active, violent inflammation, but were simply dulness of the intellect, stupor, with grinding of the teeth, &c.

The treatment, you have noted, was commenced by a large bleeding, which was followed by purging, and an attempt to mercurialize the patient, which latter failed, from the short time that elapsed between the administration of the remedies and the man's death.

The following appearances were found in the brain, twenty-four hours after death.

Marked adhesion between the dura mater and the membrane beneath. The vessels of the dura mater were more congested than usual. In taking the brain from the cranium, about two ounces of fluid escaped. The large vessels of the pia mater were much congested; the capillary vessels, of a bright red tint,—inosculating. In the middle part of the right side, the convolutions were flattened; on this side, the injection of the pia mater extended to that portion dipping into the convolutions, and it adhered strongly to the cerebral substance. The injection and adhesions were less marked towards the posterior portion. At the anterior extremity, the arachnoid membrane was opaque; the injection and adhesion somewhat less than at the middle. On the left side, this bright injection occupied the middle half, and was confined almost exclusively to the small arterial vessels. Pia mater less adherent, than in the right side. Arachnoid slightly opaque, throughout the whole extent, presenting a few minute granulations, near the parietal protuberance. The cortical substance on both sides was of a rosy tint, a little brighter on the left than on the right. That portion of the arachnoid, covering the fissure between the hemispheres, and at the summit of the brain, was slightly roughened. Corpus callosum softened. Fornix and septum lucidum pulpy. The right ventricle was larger than the left; the quantity of serum contained, not known. The thalami and corpora striata were pale. At the base of the brain, the colour was, in a great measure lost, from the commencement of decomposition; but, in the whole anterior hemisphere, injection of the small vessels was manifest. There were small adhesions between the anterior lobes of the brain. Fissure of Sylvius, on the left side, strongly adherent, by a solid deposit around the vessels, part of which, in the form of granulations, was still distinct. On the right side, the same thickening occurred around the vessels, but the newly formed matter was less abundant than

on the left side; it still presented granulations, less in size than a pin's head. The arachnoid was opaque and extremely thickened; the thickening of this membrane extended backwards over the chiasm of the optic nerves, which it slightly invested. Towards the cerebellum, the thickening of the membranes became more marked at the upper portion, at the point of junction with the cerebrum; the double secretion was there distinct, consisting, in part, of minute granulations, beneath the membrane, and in its thickness, and, in part, of a thick, opaque, hard substance, filling up the space between them. The cerebellum was firm, like the rest of the brain.

There were no tubercles in the lungs, or the viscera of the abdomen. The state of the lymphatic glands was unfortunately not noted by the gentlemen who made the examination. From the former scrofulous disease, these glands were probably tubercular.

It is to be inferred, then, that the disease of the brain was here of an inflammatory character, from the injection and thickening of the arachnoid membrane. It was evidently of the tuberculous variety, from the granulations which were found scattered beneath the arachnoid—it was a case of tubercular meningitis. The bright injection of the arachnoid, which is limited to the smaller vessels, is a very good diagnostic sign of the disease; had it been observed in the larger vessels merely, I should have regarded it as a simple congestion. In the present instance we have, then, only the alteration in the membranes of the brain, to account for the cerebral symptoms, as the substance of the organ is not at all affected.

This subject of tubercular meningitis, gentlemen, is one that will present itself frequently to your notice, as it is a disease very common with children, and by no means rare in adults. It is generally slow and insidious in its progress, and requires a very careful examination to distinguish it, particularly in its early stage. I have taken, for the subject of some general remarks to-day on this disease, a case, in which we have had the pathological phenomena very clearly presented to us, and in which the indications, previous to death, were sufficient for a correct diagnosis of the affection. This case, I may remark, exemplifies the occasional effect of measles, in giving rise to the development of tubercles, to which I alluded at my last lecture.

This individual, we learned, had had an attack of brain fever, (so termed by his mother,) many years ago, by which his mind was at the time considerably affected. This was probably a scrofulous inflammation of the same character, as that which finally carried him off. Children may recover from these tubercular cerebral affections, and, at some subsequent period of their lives, present the same symptoms in a more marked manner, from a new secretion, or, as it were, a second crop of tubercles in the membranes of the brain. So, patients may partially and temporarily recover from pulmonary phthisis, as was shown to you in a late autopsy, where co-existing with the cavities which immediately preceded the death of the patient, were distinct traces of the operation of a former cure, in the hardened cicatrices, which we found



in various parts of the lung. The man, whose case we are considering, had probably recovered from an attack of tubercular meningitis, early in life, and he might have remained well, had not the occurrence of measles awakened the slumbering tubercular disposition, and caused a fresh development of the affection, which now proved fatal.

This subject of tubercular meningitis, I investigated very fully some years ago, at the Children's Hospital at Paris, and obtained some important results as to the nature and causes of the affection. The first point of inquiry, upon entering on the subject, is, have we any evidence of the existence of tubercles, elsewhere than in the brain and its membranes, in this affection? In the children who died from this form of inflammation of the brain, I found tubercles in the bronchial glands or other organs of the body, as well as in the substance and membranes of the brain, where they were found from the size of a pin's head to that of a large pea.

There was but one evident exception to this rule, out of thirty cases, which were analyzed in a paper, which I published in the *American Journal*, in 1834. In the exceptional case, there were tuberculous granulations in the membranes of the brain, but not in other viscera. The coincidence of tubercles in various parts besides the brain conclusively proves, that a general tuberculous diathesis existed in these subjects, for in no other class of acute disease, does the same rule obtain.

Having determined the point of the general tubercular nature of the disease, the next matter to be investigated, is, the causes on which depends the development of the affection. Unquestionably, the scrofulous diathesis is the strongest predisposing cause of this affection, using the word scrofulous as significative alike of the tubercular and strumous temperament. In almost all the cases in which the cerebral affection occurs in adults, a scrofulous disease has previously existed, and perhaps been cured, in some other part of the body, as the lower extremities, the glands of the neck, the lungs, and elsewhere. As to the exciting causes of this disease, they escaped us almost entirely; in the majority of cases, at the *Enfants Malades*, we could detect no antecedent fact, which could at all account for the development of the tubercular disease of the brain. The measles, however, in the case under notice, is to be looked upon as the accidental cause of the development of the disease; and I may make the general remark, that, whenever, in a scrofulous child, you have an acute disease accompanied with fever, you may look for the development of inflammation of the brain, and are to watch your case with exceeding care.

The prognosis, in tubercular meningitis, must, generally, be more or less unfortunate, particularly in hospital practice. This deduction I base upon the observations, made by myself and my friend Dr. Rufz, at the Children's Hospital at Paris, where, for one or two that got well, forty died. Indeed, Charpentier, who observed ten years ago in the same hospital, went so far as to say that he never saw one case recover. Yet, in private practice you will find the results much more favorable. In the hospital at Paris, the children were badly fed, confined in close rooms, and the treatment prescribed was not so minutely carried into execu-

tion as in private practice. I have not seen many children with this complaint since my return to Philadelphia, but those cases which I have seen, were generally but not always fatal. A striking instance occurred in the child of one of our nurses; she was a girl of four or five years of age, and recovered entirely, but a second attack came on, a year or more after the first, and proved fatal.

The adults, who were taken with tuberculous meningitis, were all labouring under phthisis pulmonalis, which complication contributed not a little to the fatal termination of the affection. These cases, were, of course, not fair subjects for estimating the powers of treatment. In many cases, also, of this disease, the existence of tubercles in the lungs may not be ascertained during life, although they are found after death. This was the case with a negro, whom we examined some years since at the Pennsylvania Hospital. (See *American Journal*, 1836.) During life, he had neither cough nor expectoration, but we found, after death, numerous miliary tubercles in the lungs, as well as in the brain; in other words, the man laboured under general acute tubercular disease, which from the similarity in the size and appearance of the granulations, commenced nearly at the same time in the lungs and brain, but had not attained a large size in either organ. Generally, we meet with the disease in adults, under circumstances that preclude the hope of a cure; but, in children you may entertain a fair hope of success, if you see the case early; if it have advanced so far as the second stage of the disease, you have but a mere chance of saving the child from speedy death.

The symptoms differ in children and in adults. In adults, the disease appears in patients actually labouring under phthisis, or of a decidedly strumous diathesis; while it often shows itself in children, who are in the enjoyment of tolerably good health, notwithstanding some latent tendency to scrofulous diseases. Whenever in children, the symptoms which I shall describe as characteristic of the forming stage of the disease, present themselves, the physician should put himself upon the watch, though they are not to be looked upon as invariably indicative of the result in question. Tubercular meningitis may begin in two ways. First, it may come on abruptly, as ordinary acute meningitis, with vomiting, chill, and fever. The cerebral symptoms may appear, however, without even the prelude of vomiting; in adults this symptom is commonly wanting. When its approach is more gradual, the following order of phenomena is observed:—

For the first few days, the child merely evinces unusual restlessness and irritability, showing signs of the excitement of the brain. He avoids light and sound, from the extreme sensibility of the eyes and ears. We have also a change in the intelligence, if the child be old enough to permit such change to be noticed. First, it is simply excited; the child is more lively and acute, and more attentive to external objects, than before. Afterwards the countenance becomes changed; the cheeks are flushed, the eyes unusually bright, and a well-marked frown and wrinkle are to be noticed upon the forehead. This is one of the most important signs of the early stage of the disease; and at this period, it is essential to recognise all the symptoms,



and this peculiar expression you may consider characteristic. This, together with the bright red flush upon the cheek, the nurses in the Children's Hospital used to look upon as an unfailing mark of the approach of the disease. The decubitus is at this time but slightly altered. But we often meet with some secondary symptoms, which, although they are not always present, are of some moment; these are nausea or vomiting, constipation, and fever which is at first of a mild character.

We now pass to the second stage, comprising the symptoms which were first observed in the man who has just died; those of the forming stage were lost in the decline of the measles. These symptoms are delirium, which cannot of course be very accurately observed in children, particularly, if they are very young. But some signs of it may be generally detected, especially at night, in the quick answers and altered manner of the child. This delirium differs from that of ordinary acute meningitis, in which the patient is violent, noisy, and loquacious. Here there is mere dulness and stupor somewhat similar to the delirium of typhus fever; the child is not very violent, makes no efforts to walk about or to do mischief, but remains in a state of dull muttering.

I was impressed with this peculiarity of the delirium of tubercular meningitis, in two cases which came under my observation at the Pennsylvania Hospital, three years since. In one, of so moderate a character was this delirium, that the patient was admitted for simple insanity. The only other symptoms that attracted attention, upon his admission, were a peculiar hobble and limp in his gait. We found the traces of several scrofulous disorders, which had been cured, and the man had also a slight cough of which he complained for two years past. The patient was constipated before his entrance, and shortly afterwards, vomiting ensued, and then the cerebral symptoms became more decided. The paralysis occurred very early, from the coincidence of softening and inflammation of the substance of the brain, with that of the membranes. At first, in fact, I thought it was paralysis, from mere softening of the brain. Afterwards, I began to doubt, and regarded the case as one of tuberculous meningitis: finally, the autopsy cleared up all obscurity. The paralysis was found to be dependent on softening of the brain, and the delirium arose from tubercular meningitis with effusion of lymph at the base. This complication of lesions necessarily gave rise to the intermixture of the symptoms of meningeal with those of cerebral inflammation. In practice this coincidence is by no means rare, and it is not often difficult to detect it. The seat of the disease was here the same as in the case of the man Crane; the deposit of tubercles was along the blood vessels, following the ordinary law which regulates the secretion of tubercular matter.

Besides the delirium of the second stage, we meet with alteration of the senses, as in the case of Crane. The pupils are generally dilated, moderately and gradually; in some cases, they are contracted, but, as was observed by Dr. Stewardson in the present case, it is difficult to tell when they are permanently contracted, being at one time contracted, and at another dilated. These alterations

in the pupils are most important signs, particularly when accompanied by the muttering delirium.

Lesions of motility next present themselves. These consist at first principally in subsultus or even spasms, as in typhus fever; indeed I have sometimes hesitated for a little while in my diagnosis, between the two affections. Paralysis is by no means a necessary symptom in the second stage of the disorder. But we have now the beginning of another symptom, rigidity. In the case of a man now in the wards, this stiffness could be detected only by careful examination of the elbow, but it may be usually very early ascertained with proper caution. This rigidity differs from contraction, which is a more advanced degree of it, and is more rarely met with in this form of meningitis. Rigidity is not here confined to one side of the body, as in apoplexy and softening of the brain. The tubercles are secreted, on both sides of the base of the brain, and, hence, the symptoms of disease of the membranes are rarely confined to one-half the body, while those of the cerebral substance are rarely extended beyond it.

These are the chief cerebral symptoms of the second stage of the affection. We now pass to another set, those of the digestive organs. Vomiting is one of the most constant symptoms of tubercular meningitis, in children, but it rarely continues beyond the first stage. Another peculiar and important symptom is constipation. In the second of the two patients in the Pennsylvania Hospital, to whom I have alluded, the case was at first looked upon by his physician as one of simple constipation; and the true nature of the complaint was suspected only when it was found that this symptom did not yield to purging. This symptom gives us a valuable therapeutic indication, in the treatment of the affection—the propriety of purging. The appetite is generally lost from the beginning of the affection. The thirst is in proportion to the degree of fever present. The state of the pulse may be learned from the case of Crane. In him, the *bis feriens* pulse, of 40 and 66 per minute, existing during the convalescence of measles, rose at once to 90, and continued at this point till the third stage, when it sunk again to 85. It was therefore simply febrile in the second stage, and irregular in the first and third. It is rarely slow, and slowness may be looked upon as always a good symptom.

The other symptoms are less significant in their character, and I would merely refer you to the memoirs which I published in the American Journal, in the years 1834, '35.

In the third stage, or after effusion of serum, pus, or lymph has taken place, the ordinary termination of serous inflammations, to which I called your attention in my last lecture, we have a subsidence of the acute febrile disturbance, the pulse is often preternaturally slow, and partial paralysis presents itself, from the pressure of the effusion, which is not necessarily confined to one side of the body, and is slow and gradual in its advances.

I have given you merely a slight sketch of the pathological anatomy of this affection, as I do not, in this course, intend to dwell, at any great length, upon this subject. The treatment of tubercular meningitis, to the consideration of which we now



pass, involves many important questions. It must vary, according to the severity of the actual symptoms, and the circumstance of the existence of a previous tubercular disease. If the patient is in the third stage of phthisis pulmonalis, you can of course do little or nothing. If this be not the case, however, you may, I think, do much. The case must be at first treated as one of simple meningitis. Your object should be to get rid of the acute inflammation of the brain, the existence of which increases the disposition to tubercular secretion, and may at once kill the patient. You must not, however, deplete to the same extent that would be advisable, if there were no tubercular disposition. You are to steer a middle course. My plan is to resort to blood letting, general and local, unless the development of tubercles be very strongly marked. I have recourse to general blood letting, once, and once only, even in adults. It is an old remark of writers, that inflammations of the membranes of the brain generally bear extensive depletion worse than those of other organs, but always tolerate well the local abstraction of blood. Local bleeding is to be directed, so long as the patient can bear it, that is to say, until he becomes pale, and the flush is gone, whether the other symptoms abate or not. After depletion, I was formerly in the habit of placing blisters to the back of the neck. I am now in the practice of applying them behind the ears. The discharge can here be kept up longer, and will act more steadily, and the sore can be better dressed; the patient may be mercurialized by dressing these blisters with mercurial ointment. The discharge by the blisters I keep up, until the patient is perfectly well. Another remedy is counter-irritation elsewhere than in the head. The feet are apt to be cold; they are to be plunged into hot water, from time to time, to be clothed with flannel, and rubbed occasionally with cayenne pepper. But you are to abstain from blistering; it only serves to create fever, and is generally mischievous. Sinapisms may be used, but the surface is not to be vesicated.

The next remedy to be employed is purging. If the patient be strong and robust, it answers a very good purpose, and in a few rare cases at once relieves him. But in children, if relief be not afforded by one or two purgative doses, it is proper to be cautious as to their employment. With children I begin with a mercurial purge, from four to eight grains of calomel, to be followed by a saline purgative. Mercurials are used by the French merely for the purpose of purging; of course they do not salivate, and, when persisted in, do no good. If the acute stage of the disease have abated, you must commence with mercurial dressings and frictions to the abdomen. These are of most service in the sub-acute variety of the disease.

I have now detailed you the ordinary practice, to be observed in the management of tubercular meningitis. To one or two points, your attention is to be particularly directed. You must carefully watch the moment, when it is proper to stop blood-letting, and immediately after commence the introduction of mercury into the system.

After the third stage of the disease is established, and paralysis makes its appearance, treatment can do no good. The affection is fatal, because the

functions of the brain cannot be interfered with, with impunity.

Tubercular serous inflammations are not elsewhere so fatal, as when they occur in the membranes of the brain. When secondary peritonitis and pleurisy destroy life, they usually arise from perforation of the glands of Peyer, and from perforation of the lungs.

The tuberculous inflammations of these membranes, however, assume a much higher importance from their disposition to return, and even to attack other portions of the body. Besides, they certainly favour the development of tubercles, in cases in which the patient may have previously presented merely the diathesis which precedes this morbid deposit. For a more complete account of this connection, I must refer you to my lectures on pathological anatomy.

The symptoms and treatment of tuberculous meningitis you will find detailed in the memoirs which I published in the American Journal, in the years 1834—5, as well as in the paper of my friend, Dr. Rufz.

## CLINICAL REPORTS.

*List of Accidents, admitted into the Pennsylvania Hospital, from May 2d to May 16th, 1838.*

One case of lacerated wound of the thick part of the fore-arm, caused by the bursting of a gun; dressed with a poultice and carved angular splint; matter formed beneath the fascia, which was freely opened; now healing. One case of incised wound of the ankle, caused by a cut with an axe; the integuments cut through to the bone, the joint, however, escaped; the posterior tibial artery and tendo Achillis were both divided; vessels secured; wound poulticed; foot extended, and placed in a carved splint; doing well. One case of incised wound of fore-head, of upper lip, division of lower lip, and of portion of tongue; fore-head and upper lip dressed with adhesive plaster; lower lip with hare-lip needle and suture; tongue hooked out of the mouth and stitched; since dead from mania a potu. One case of simple fracture of both bones of the leg, from a fall, dressed with fracture box. One case of fracture of tibia, close to the ankle, caused by a fall; dressed in same manner. One case of deep incised wound of the abdomen, caused by a stab with a dirk; peritonitis followed, treated accordingly, and doing well. One case of compound comminuted fracture of both bones of the leg, caused by being run over by a heavy waggon; sloughing ensued, and, afterwards, mortification, which extended to the groin; dressed with large fomenting poultices, fracture box, full diet, quinine, porter, &c.; attacked with mania a potu; since dead. One case of simple oblique fracture of the lower end of the radius; dressed with two padded splints. One case of simple fracture of the tibia near the ankle, and of fibula near the knee; dressed with fracture box. One case of dislocation of the upper extremity of the radius, to be reported at length in the next number.

Dr. Thomas Stewardson was elected one of the Physicians to the Pennsylvania Hospital, on Monday, 14th of May.



## FOREIGN SUMMARY.

*M. Ricord's Practice in Gonorrhœa.*—During the acute stage of gonorrhœa, when the pain is severe and the scalding troublesome, he applies 25 leeches to the perineum, and orders baths, cataplasms, &c., and in order to mitigate the painful erections, he gives

Camphor, 2 scruples;  
Extract of opium, 8 grains;

divide into 16 pills, two to be taken every evening.

When the disease has passed to the chronic stage, M. Ricord orders

Powdered cubebs, 4 ounces;  
Peroxide of iron, 2 drachms;

a powder to be taken every day; in addition, the patient is directed to inject, four times a day, a fluid composed of

Distilled water, 8 ounces;  
Nitrate of silver, 2 grains.

Finally, when the running is of very long standing, and constitutes what is called an old gleet, he makes the patient inject the following solution,

Red wine, 6 ounces;  
Tannin, 20 grains.

The regimen, during the acute stage, is mild and mucilaginous. Drinks are frequently administered.

*Kermes Mineral in Pneumonia.*—Dr. Lemarchand, of Le Mans, publishes several observations, in the *Journal des Connaissances Medico-Chirurgicales* for February, illustrative of the good effects of kermes mineral, in large doses, in conjunction with general and local bleeding, counter-irritation, &c., in the treatment of pneumonia. His cases show rapid amelioration of the symptoms, under the use of the remedy, which was not followed by either diarrhœa or vomiting.

*On the Medicinal Powers of the Caïnca, by Dr. Robredo.* Baron Langdorf, Russian consul-general at Rio Janeiro, first announced, a few years ago, the wonderful virtues of this plant in Europe. It is the *Chiococca racemosa* of Linnæus, and of the natural family *Rubiaceæ* of Jussieu, and is very abundant in the Antilles, the Floridas, and many parts of Brazil. Its root is composed of a delicate bark, which has a bitter and slightly acrid and astringent taste, and, when broken, offering a resinous aspect; and a woody centre, which does not partake of these properties. Messrs. Pelletier and Caventou have found that it contains a bitter principle, to which they have given the name of Caïncaic acid, an oily matter of a green colour, another of a yellow colour, and a coloured viscous substance. From the experiments of Messrs. Caventou and François, it appears that the root, and especially the caïncaic acid, are powerfully tonic; that they increase the secretion of urine in a very remarkable manner, and that they are slightly purgative.

Three cases are related by Dr. Robredo in confirmation of these opinions. In the first case, a

bilious diarrhœa had reduced the strength of the patient, a female, extremely; the suppression of this diarrhœa being always followed by thirst, scanty urine, extensive œdema, and excessive prostration. A recurrence of the diarrhœa removed these symptoms, but exhausted rapidly the strength of the patient. The employment of caïnca was begun, when the dropsical symptoms were extreme and the urine scanty and sedimentous. A decoction of a drachm of the root in a pint of water was administered daily. The second day of its employment ten pints of clear urine were discharged, the stomach performing its functions regularly; and in five days a cure was effected, which the author thinks is radical, since, at the period of his writing, three months had elapsed without any disturbance of the patient's health, and her strength was quite restored.

In the second case, amenorrhœa had been treated by copious bloodletting, and anasarca was the consequence. The author having ascertained, by examination, that there was no disease of the uterus, administered caïnca. The ultimate effect was more slowly produced; fifteen days having been required for a cure, and the dose of the medicine (probably from deficient susceptibility of the patient,) having required increasing to a drachm and a half daily.

In the third case, that of a boy eight years old, there was extreme marasmus, œdema, costive bowels, and enlargement of the spleen; the whole the result of an ague of three months' duration. All the symptoms, the enlargement of the spleen excepted, were removed in eight days, by means of a decoction of half a drachm of the root daily; and, by appropriate remedies, the spleen was afterwards reduced to its natural condition.—*Brit. and For. Med. Review, from Jornal de la Academia de Medicina de Megico. Octobre, 1836.*

*Notice of the Bafureira of Cape de Verd, by Dr. B. A. Gomes.*—This plant is indigenous at Cape Verd, and is employed by the inhabitants of the Cape Verd Islands, and the coast of Africa, to increase the secretion of milk. The writer has been assured by persons whom he thinks worthy of credit, that, not only is it efficacious for this purpose in women who have been recently confined, but that it produces the secretion in virgins and persons of advanced life; so that infants have been nursed for a long time by females who, from their age and other circumstances, could not have furnished the secretion under the influence of any natural stimulant. Its mode of employment is by means of poultices, made of the green leaves, applied to the mammæ; or a strong decoction, with which the same parts and external organs of generation are washed. Sometimes such a decoction is taken internally, conjointly with its external application. The plant belongs to the family *Euphorbiaceæ* and the genus *Ricinus*. The writer is doubtful whether it is a variety of the *Ricinus communis*, or a distinct species. It has been raised in the garden of the Marine Hospital at Lisbon, from seeds sent from Cape Verd.—*Ib., from Jornal da Sociedade das Sciencias Medicas de Lisboa. Novembro, 1836.*